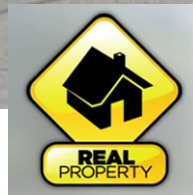


LOCAL TECHNICAL ASSISTANCE PROGRAM



Fall 2012



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Federal-Aid Essentials for Local Public Agencies

Federal-Aid Simplified. Understanding the Essentials.

The *Federal-aid Essentials for Local Public Agencies* is a transportation resource designed to help local agency professionals navigate the Federal-aid Highway Program. Federal-aid Essentials is structured for busy agency staff who want further understanding of Federal-aid policies, procedures, and practices. You will find quick answers, straight to the point, and presented in plain language to help you make the right decisions in successfully completing federally funded projects.

The Federal-aid Essentials website contains a resource library of informational videos and related materials. Readily accessible and available when you need an answer, each video addresses a single topic presented in everyday language-condensing the complex regulations and requirements of the Federal-aid Highway Program into easy-to-understand concepts and illustrated examples. This Web site allows you to indicate areas of interest and receive alerts when material that matches your interests becomes available. You also can give feedback that will help FHWA continue to provide useful assistance.

More and more transportation agencies must pursue better, faster and smarter ways of doing business. Federal-aid Essentials offers a central online library of informational videos and resources, designed specifically for local public agencies.

Federal-aid Essentials can become your personal reference library available 24 hours a day. Consult Federal-aid Essentials at the start of a new roadway project concept, or when questions arise about financing, right-of-way, or environmental impacts. Or, you may have a concern about Civil Rights, or a need for more information on project development or construction administration. You may simply want to review the process to closeout a project. Federal-aid Essentials offers a wide range of video modules to address questions and concerns.

....continued on page 2



<http://ltap.colorado.edu/>

Introduction to Right-of-Way Requirements and the Uniform Act

All project right-of-way requirements must be met when Federal-aid is used



.....continued from page 1

PROGRAM TOPICS:

- Federal-aid Program Overview
- Civil Rights
- Environment
- Finance
- *Right-of-Way*
- Project Development
- Project Construction and Contract Admin

For Example - The Right-of-Way section covers Introduction to Right-of-Way Requirements and the Uniform Act; Project Development; Property Management; Uniform Act: Valuation; Uniform Act: Acquisition and Negotiation; and Uniform Act: Relocation Assistance. Although the videos in each section can be viewed in any sequence, the titles are arranged in a recommended or preferred order for your convenience.

The Colorado Department of Transportation is knowledgeable about Federal-aid projects and is your primary resource for complying with Federal requirements. This Federal-aid Essentials site also includes a comprehensive directory of State Resources, consisting of links to local program websites, manuals, references, local technical assistance programs, and local program coordinators. Federal-aid Essentials helps you pursue better, faster and smarter ways of delivering the Federal-aid program, with the overall goal of ensuring a strong, safe infrastructure serving the public interest.

Start here for help managing your next Federal-aid transportation project:
[http://www.fhwa.dot.gov/federal-aid essentials/index.cfm](http://www.fhwa.dot.gov/federal-aid%20essentials/index.cfm)

COLORADO LTAP

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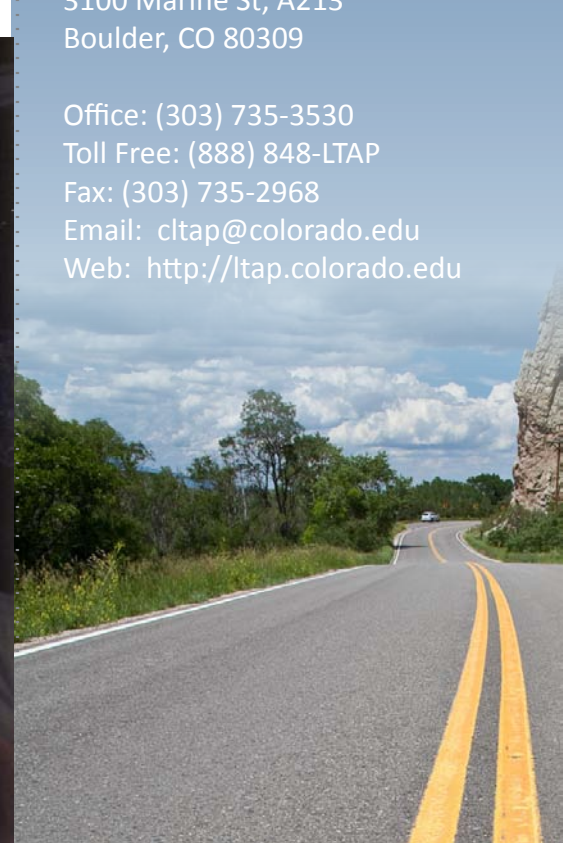
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The Local Technical Assistance Program (LTAP) is sponsored by the Federal Highway Administration, the Colorado Department of Transportation, and the University of Colorado at Boulder to provide information on the latest transportation issues facing Colorado's state and local governments.

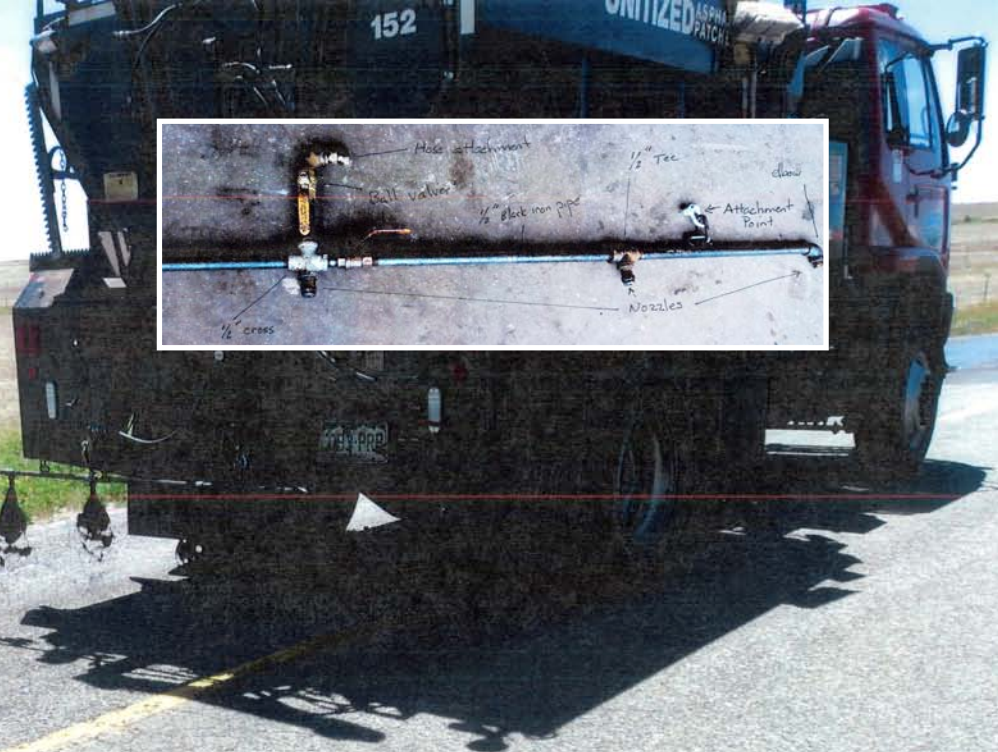
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2012 COLORADO YOU SHOW US WINNER

REGION 7 WINNER



ASPHALT SPRAY BAR BY EL PASO COUNTY

Problem Statement:

A problem developed during asphalt patching operations. When patching larger areas, for example "blade patching" using a grader or backhoe bucket, truck mounted spray wands were used to apply the "tack oil" so the asphalt would adhere properly to the existing asphalt surface. Doing this by hand resulted in uneven application, the use of too much product, and on windy days, the operator getting covered with tack oil - ruining clothing, getting into the trucks and worse at times getting into eyes and faces of employees. Using a distributor truck for these relatively small jobs was "overkill" and was too problematic with the amount of tack oil involved.

Solution:

A pair of employee operators came up with a simple, cheap, and effective solution. Using their own time money for the prototype, they developed a "spray-bar" that hung on the back of the asphalt patch truck, on the lift arms for the patch roller. The hand wand can be quickly disconnected, and the hose attached to the spray-bar. The bar has several valves that can control the width of the area being sprayed and the roller lift can raise or lower the bar changing the thickness of the pattern. This can all be turned on and off from inside the cab while on the move.

Labor, Equipment and Materials Used:

Materials involved were a few spray nozzles, 1/2" iron pipe, 1/2" tees, and a few ball valves. Total cost was about \$40. Fleet services quickly copied the prototype and now all our patch trucks with a spay system now have a spray-bar attachment, that can be hooked up and put to use when the job calls for it.

Savings and Benefits to Agency:

The effect on the job was immediate and dramatic, we were seeing a more even application of the tack oil, resulting in a better final product, using about a third less oil - saving us money at the onset. To top it all off, our operators were no longer going home "wearing" a layer of tack oil, keeping it out of their eyes and off their clothes.

The spray-bar project has proven to be a "win/win" for the county and the workers!

Contact: John McMinn, Asphalt Foreman, El Paso County Public Services, 3275 Akers Dr, Colorado Springs CO 80922



Forklift Competency Certification

El Paso County recently hosted Colorado LTAP's Forklift Competency Certification training program in Colorado Springs. The 8-hr Forklift Certification course was offered as an Elective in the Roads Scholar I program.

The morning session consisted of a classroom lesson covering operational considerations - safety inspections, operator safety, lifting, moving, and setting down loads. The material was presented in an easy to understand format using short videos, handouts, and workbooks. Proficiency testing was provided throughout; and a certificate of training and operator competency wallet card were provided at the successful conclusion of the class. The afternoon session provided participants with hands-on operation on a forklift. This training meets OSHA Standards and OCPO Training Units Standards.

A list of upcoming courses in each of our three training programs is available online at <http://ltap.colorado.edu/>.

We'd like to thank El Paso County for their continued support of the LTAP training program by providing training rooms and equipment for so many of our recent training events.



Circuit Rider Corner— Forklift Safety Practices

By Bill Kaslow, Oregon Roads No. 98/99/100

Forklifts are heavy. They move fairly slow, and can be dangerous in the control of both experienced and inexperienced operators. Approximately every 3 days, someone is killed in a forklift accident and almost 95,000 forklift-related injuries get reported each year. OSHA indicates about 70% of all accidents could have been avoided with proper safety training. These statistics deserve the attention of every agency that uses forklifts, and every supervisor responsible for operator training.

Basic Training All Forklift Operators Should Receive

Since 1999, a comprehensive set of OSHA safety rules has existed for forklifts, which recognize the potential for accidents, injuries and deaths. Agencies must provide both classroom training and hands-on equipment evaluations for all operators, even those who may rarely use the equipment. Some of the training items/areas every operator must receive prior to using a forklift are:

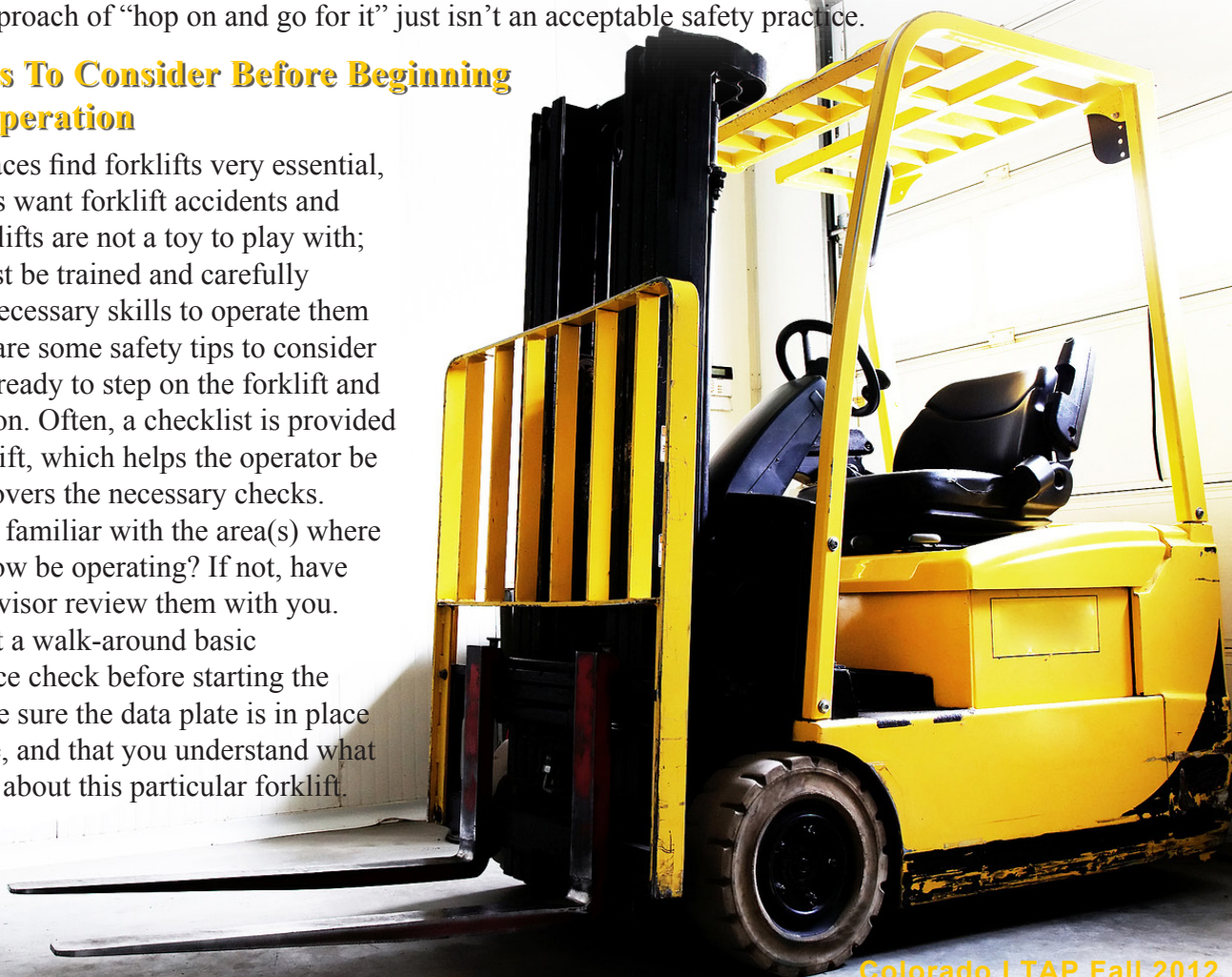
- Forklift engineering principles (Stability Triangle, load balancing, etc.)
- Operating rules (all equipment comes with these)
- Equipment characteristics (power, capacity, etc.)
- Basic operator maintenance
- Environmental hazards
- Hazardous locations for use
- Surface operating conditions
- Site-specific operations
- Potential hazards at the use site

In addition, potential operators must receive training in the general layout and use of forklift controls, levers, and so on. The approach of “hop on and go for it” just isn’t an acceptable safety practice.

Safety Tips To Consider Before Beginning Forklift Operation

Most workplaces find forklifts very essential, but none of us want forklift accidents and injuries. Forklifts are not a toy to play with; operators must be trained and carefully develop the necessary skills to operate them safely. Here are some safety tips to consider once you are ready to step on the forklift and begin operation. Often, a checklist is provided for each forklift, which helps the operator be sure he/she covers the necessary checks.

- Are you familiar with the area(s) where you will now be operating? If not, have your supervisor review them with you.
- Conduct a walk-around basic maintenance check before starting the forklift. Be sure the data plate is in place and legible, and that you understand what it tells you about this particular forklift.



- Check the tires (chunks missing, air pressure OK, lug nuts tight); forks (stress/fatigue cracks); mast, pressure hoses, and chains. Then check the forks back rest; engine fluid levels and circulating hoses. Do you have a clear view through the overhead guard? Is the seat belt in place? Are the batteries and fuel secure? Are the mirrors in place? Is there any fluid showing under forklift? and so on.
- Climb on using the three-point mount. Put on the seat belt and adjust the seat. Check steering play. Familiarize yourself with the gauges and control levers. Be sure operating gear is in neutral and the parking brake set. Adjust mirrors as necessary.
- Start the forklift. Does it sound OK? Check all the gauges, backup alarm, lights, horn, brakes, and so on. How's your overhead clearance if you elevate the forks/mast at this location?
- Once again, familiarize yourself with the control levers now that the engine is running, but be sure others are clear first. Work with a spotter, if available, while doing this.
- At least once a week, at start-up, raise the mast/forks to their highest level to lubricate the mechanisms involved. Don't forget that overhead clearance check first! Make sure there are no pedestrians near who might decide to walk under or near those raised forks.

If you note any problems with the brakes, steering, horns, or tires, or see any leaks, report them immediately.

Basic Operating Safety Tips

Many workplaces couldn't do without forklifts, but they can certainly do without forklift accidents and the resulting injuries. Here are some basic operating safety tips now that you're ready to start up the forklift.

- Check the load you're about to transport. Does its weight fall within the forklift's load capacity, as noted on the forklift data plate? Remember that forklift attachments usually reduce normal capacity.
- Is the load well-balanced and secure on the pallet; load center of gravity at a proper load center (center point of the pallet?) Does the pallet look stable, or is it cracked, deteriorating, possibly close to collapse?
- Exercise caution when handling unusually shaped and off-center loads. Four common causes of unstable loads are damaged pallets, overhanging loads, off-center loads, and loose or slippery loads.
- Slowly approach the pallet and load, making sure the forks are spread properly (not too close and not too wide) and will slide easily into the pallet. Move under the load until the pallet nudges against the back rest/vertical portion of the forks, or as far as possible.
- Before moving forward or back, check for people or potential obstacles in or near your travel path. If the load is tall enough to obscure your view forward, drive with the load trailing.
- Lift and lower the load only when stopped. Never walk, stand, or allow anyone to pass beneath a raised load.
- Drive straight up and back straight down inclines and ramps. If the load obscures your view, work with a spotter to guide you safely forward.
- Slightly tilt back load/forks and raise to a safe traveling height.
- Stay alert; be aware of the traveling surface(s); avoid sudden braking.
- Travel at a walking speed of no more than 4 – 5 MPH.
- Remember – No riders/passengers!
- Turn in a sweeping motion, using the inside front tire as a pivot point for tight turns.
- Sound the horn when approaching corners and blind areas.
- Avoid running over loose objects or through fluids on the travel surface.
- If crossing railroad tracks or similar bumpy surfaces, cross them at a diagonal.
- Remember that the two most common forklift hazards are tipping and pedestrians.



GRAVEL ROAD MAINTENANCE AND DESIGN TRAINING AVAILABLE ONLINE

This online distance-learning course was created in an effort to help local agencies provide training for their staff in a more cost-effective manner. The online curriculum is similar to traditional classroom training but perfect for students who are unable to travel or prefer a “work at your own pace” environment. Students are free to access the course anytime and anywhere within a three-month timeframe.

This course helps supervisory personnel and operators better understand the materials, techniques, and equipment needed for maintaining gravel roads. It also reviews new techniques and ideas in gravel road maintenance. The course is made up of 10 lessons, each containing a narrated presentation, video clips, reading assignments, a quiz, time to reflect on what has been learned, and time to develop an action plan.

The course was designed to help students succeed. One way we accomplish this goal is by allowing students to take the quizzes and final test as many times as necessary until they understand the curriculum. Students may repeat the lesson or parts of the lesson and then test themselves again. Test questions change with each attempt. All reading assignments are available online within the course, so no additional books or materials need to be purchased.

COURSE LESSONS:

1. The properly shaped gravel road
2. Distresses in gravel roads
3. Drainage
4. Adding gravel
5. What is good gravel
6. Turning a poor gravel road into a good one
7. Shaping the roadway
8. Dust control
9. Equipment innovations
10. Summary and conclusion

Who Should Take This Course

Operators, supervisors, township officials and anyone responsible for maintaining gravel roads.

Credit

In Colorado, students will earn 1.0 Roads Scholar Elective credit for completing the course. Participants may also register for Continuing Education Credit. As this course was developed by the Minnesota LTAP, the course meets continuing education requirements for *Minnesota*. It is the responsibility of the participant to validate CEUs in Colorado.

Course Instruction

The curriculum is a collaboration of work from John Okeson, MN LTAP face-to-face workshop instructor; former instructor Rick West; and Ken Skorseth, *Gravel Road Maintenance: Meeting the Challenge DVD* instructor. Online materials include curriculum from the MN LTAP face-to-face workshop, the DVD, and the FHWA *Gravel Road Maintenance and Design Manual*.

For More Information

For more information or with questions about the course, contact Mindy Carlson, carlson@umn.edu, 612-625-1813.

The Gravel Road Maintenance and Design online distance-learning course is a hit with students from Alaska to Botswana!

REGISTER TODAY

<http://www.mnltap.umn.edu/training/topic/maintenance/gravel/online.html>



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NEW CDOT FLAGGER MANUAL AND EXAMINATIONS

CDOT HAS RECENTLY REVISED ITS INTERNAL PROCEDURAL DIRECTIVE (306.1) WHICH PROVIDES THE GUIDELINES FOR CDOT'S FLAGGER CERTIFICATION PROGRAM.

CDOT HAS REVISED THE FLAGGER TRAINING MANUAL AND FLAGGER EXAMINATIONS TO COMPLY WITH THE CURRENT APPROVED MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). FLAGGER CERTIFYING AGENCYS MUST COMPLY WITH ALL CURRENT, APPROVED CDOT MATERIALS IMMEDIATELY. **NOTE: THE FLAGGER DVD PROGRAM THAT HAS BEEN IN USE IS NO LONGER VALID WITH THE USE OF THE NEW FLAGGER TRAINING MANUAL.**

THE REVISED FLAGGER CERTIFICATION MATERIALS ARE POSTED ON CDOT'S WEBSITE IN A .PDF VERSION FOR EASY DOWNLOAD. YOU CAN ACCESS THE *FLAGGER TRAINING MANUAL* AND *FLAGGERS REFERENCE GUIDE* AT [HTTP://WWW.COLORADODOT.INFO/BUSINESS/MANUALS/FLAGGER-TRAINING.HTML](http://www.coloradodot.info/business/manuals/flagger-training.html).

YOU CAN REQUEST UPDATED *FLAGGER EXAMINATIONS* BY EMAIL: CDOT.FLAGGER@STATE.CO.US.

REVISED *FLAGGER CARDS* ARE AVAILABLE THROUGH THE BID PLANS OFFICE AT 303-757-9314. CURRENT SUPPLIES OF FLAGGER CARDS MAY BE USED UNTIL SUPPLIES ARE EXHAUSTED AT WHICH TIME THE NEW REVISED FLAGGER CARDS MUST BE OBTAINED.

